

[Serial No. 09/477,725]

a liquid crystal material filled into a gap between said electrodes, the liquid crystal material comprising a rod-shape liquid crystal compound,

    said liquid crystal material having a property such that charge-transport properties are varied according to a phase transfer between a plurality of stable liquid crystal phases of the liquid crystal and/or a history of the phase transfer, the phase transfer of the liquid crystal material occurring upon a change in temperature of the liquid crystal material between a crystalline phase at a room temperature to an isotropic phase in a final state through a smectic phase at an elevated temperature,

    said liquid crystal material comprising a material selected from the group consisting of a phenylbenzothiazole liquid crystal, 4-hexyloxy-4-butanoylbiphenyl, and a phenylnaphthalene liquid crystal wherein the phenylnaphthalene is one selected from the group consisting of 2-(4'-octylphenyl)-6-dodecyloxynaphthalene, 2-(4'-octylphenyl)-6-butyloxynaphthalene, 2-(4'-octylphenyl)-6-nonyloxynaphthalene and a mixture thereof,

[Serial No. 09/477,725]

a thickness of the gap between the electrodes being larger than a domain size of the liquid crystal compound at least in the initial state of the liquid crystal material, and

the thickness of the gap between the electrodes being smaller than a domain size of the liquid crystal compound in a cooled state from the isotropic phase in a final state.

✓  
Cancel claims 25 to 27 without prejudice or disclaimer.

✓  
Amend claim 28 as follows:

✓  
28. (Amended) The information recording medium according to claim 20, wherein the phenylbenzothiazole liquid crystal material is 2-(4'-heptyloxyphenyl)-6-dodecylthiobenzothiazole.

✓  
Cancel claims 29, 34 to 36, and 38 without prejudice or disclaimer.